

Technical Data Sheet

**Centrex ASA 814 000000NAT**



Acrylonitrile Styrene Acrylate

**Product Description**

Centrex ASA 814 000000NAT is a Acrylonitrile Styrene Acrylate material and is typically used in Injection Molding applications. Features include: Good Processability, Good Weather Resistance, High Gloss, High Impact Resistance, and UV Resistant.

<b>Processing Method</b>	Injection Molding
<b>Attribute</b>	Good Processability; Good Weather Resistance; High Gloss; High Impact Resistance; UV Resistant
<b>Forms</b>	Pellets
<b>Application</b>	Decorative Displays; Electronic Displays; Lawn & Garden Equipment; Marine Applications; Outdoor Applications; Spas; Sporting Goods; Water Sports Equipment

Typical Properties	Nominal Value	Units	Test Method
<b>Physical</b>			
Melt Flow Rate, (200 °C/10.0 kg)	9.0	g/10 min	ASTM D1238
Density - Specific Gravity	1.05	g/cm <sup>3</sup>	ASTM D792
<b>Mechanical</b>			
Tensile Strength at Yield, (5.1 mm/min)	38.6	MPa	ASTM D638
Flexural Modulus, (1.3 mm/min, Tangent)	2240	MPa	ASTM D790
Tensile Modulus, (5.1 mm/min)	2100	MPa	ASTM D638
Flexural Strength, (1.3 mm/min)	68.6	MPa	ASTM D790
<b>Impact</b>			
Instrumented Dart Impact			
(23 °C)	33.0	J	ASTM D3763
(-30 °C)	8.20	J	ASTM D3763
Notched Izod Impact			
(23 °C, 3.18 mm)	270	J/m	ASTM D256
(-30 °C, 3.18 mm)	75	J/m	ASTM D256
<b>Hardness</b>			
Rockwell Hardness, (R-Scale)	101		ASTM D785
<b>Thermal</b>			
Deflection Temperature Under Load Unannealed (264 psi)			
(3.18 mm)	71.1	°C	ASTM D648
(6.35 mm)	76.7	°C	ASTM D648
RTI Elec, (1.5 mm)	50.0	°C	UL 746B
RTI Imp, (1.5 mm)	50.0	°C	UL 746B
RTI Str, (1.5 mm)	50.0	°C	UL 746B

**UL Information**

Flame Rating	HB	UL 94
UL File Number, (USA)	E150937	

<b>Injection Parameters</b>	<b>Nominal Value</b>	<b>Units</b>
Drying Time	2	hr
Drying Temperature	82 to 88	°C
Suggested Max Moisture	0.1	%
Nozzle Temperature	238 to 271	°C
Processing (Melt) Temp	238 to 271	°C
Front Temperature	238 to 271	°C
Screw L/D Ratio	20.0-1.0	
Screw Compression Ratio	2.5-1.0	
Suggested Shot Size	50 to 70	%
Middle Temperature	238 to 271	°C
Rear Temperature	238 to 271	°C
Injection Rate	Moderate	
Mold Temperature	43 to 82	°C